(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 28 April 2005 (28.04.2005)

PCT

(10) International Publication Number WO 2005/038347 A3

(51) International Patent Classification⁷: F23Q 7/06

F23D 11/00,

(21) International Application Number:

PCT/US2004/033140

(22) International Filing Date: 7 October 2004 (07.10.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/509,813

10 October 2003 (10.10.2003) U

(71) Applicant and

(72) Inventor: BACON, David, W. [US/US]; 463 Cardinal Drive, Paige, TX 78659-4905 (US).

(74) Agent: BUSHMAN, C., James; Browning Bushman PC, 5718 Westheimer, Suite 1800, Houston, TX 77057 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AI, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,

KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

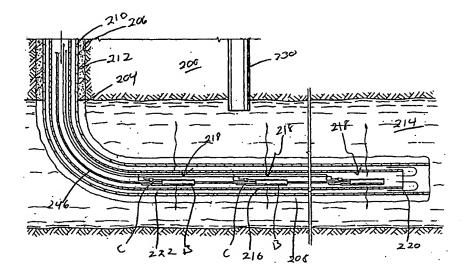
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, Cl, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 18 August 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS FOR IGNITING COMBUSTIBLE MEDIUMS



(57) Abstract: An apparatus for initiating ignition of a combustible material, the apparatus including an igniter assembly having a support, a catalytic material carried by the support, the catalytic material comprising a substance which reacts with a hydrogen-containing gas in the presence of an oxidizing gas to produce an exothermic reaction and a temperature sufficient to cause auto ignition of the hydrogen containing gas, a source of hydrogen-containing gas and a source of oxidizing gas.

2005/038347 A3 IIIII